

CLAIMS AMENDMENTS

Claims 1-9 (canceled).

Claim 10 (withdrawn): A method for dealkylation of a phosphate ester or an ether, comprising contacting the phosphate ester or ether with a compound comprising the general formula $L\{YX_m\}_n$ wherein:

L is a Schiff base-containing ligand;

Y is selected from the group consisting of boron, aluminum, gallium, indium, and tellurium;

X is selected from the halide group consisting of fluorine, chlorine, bromine, iodine, and astatine; and

m and n are integers having a value of at least 1.

Claim 11 (withdrawn): The method of claim 10, wherein L is a salen ligand.

Claim 12 (withdrawn): The method of claim 10, wherein L is a bidentate ligand.

Claim 13 (withdrawn): The method of claim 10, wherein L is a quadridentate ligand.

Claim 14 (withdrawn): The method of claim 10, wherein L is selected from the group

consisting of Salen (^tBu), Salpen (^tBu), Salben (^tBu), and Salhen (^tBu).

Claim 15 (withdrawn): The method of claim 10, wherein Y is boron or aluminum.

Claim 16 (withdrawn): The method of claim 10, wherein X is chlorine, bromine, or iodine.

Claim 17 (withdrawn): The method of claim 12, wherein m and n are 2.

Claim 18 (withdrawn): A catalytic method for dealkylation of a phosphate ester or an ether, comprising contacting the phosphate ester or ether with the compound of claim 2 in the presence of BBr₃.

Claim 19 (withdrawn): The method of claim 18, wherein the phosphate ester or ether and BBr₃ are added in equimolar amounts.

Claim 20 (withdrawn): The method of claim 18, wherein the dealkylation is conducted at ambient temperature.

Claim 21 (withdrawn): A catalytic method for dealkylation of a phosphate ester or

an ether, comprising contacting the phosphate ester or ether with a compound comprising the general formula $L\{YX_m\}_n$ wherein:

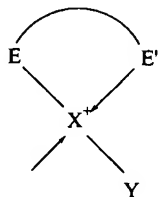
Y is selected from the Group 13 elements consisting of boron, aluminum, gallium, indium, and tellurium;

X is selected from the halide group consisting of fluorine, chlorine, bromine, iodine, and astatine;

L is a chelating ligand containing at least two molecules E and E' contacting the Group 13 element, the molecules E and E' being selected from the group consisting of C, N, O, and S; and

m and n are integers having a value of at least 1.

Claim 22 (withdrawn): The method of claim 21, wherein the compound generates a cationic intermediate upon contacting the phosphate ester or ether, the cationic intermediate having the general formula:



Claim 23 (withdrawn): The method of claim 21, wherein L is a Schiff base-containing ligand.

Claim 24 (withdrawn): The method of claim 21, wherein L is a salen ligand.

Claim 25 (withdrawn): The method of claim 24, wherein L is a bidentate ligand.

Claim 26 (withdrawn): The method of claim 24, wherein L is a quadridentate ligand.

Claim 27 (withdrawn): The method of claim 24, wherein L is selected from the group consisting of Salen (^tBu), Salpen (^tBu), Salben (^tBu), and Salhen (^tBu).

Claim 28 (withdrawn): The method of claim 21, wherein Y is boron or aluminum.

Claim 29 (withdrawn): The method of claim 21, wherein X is chlorine, bromine, or iodine.

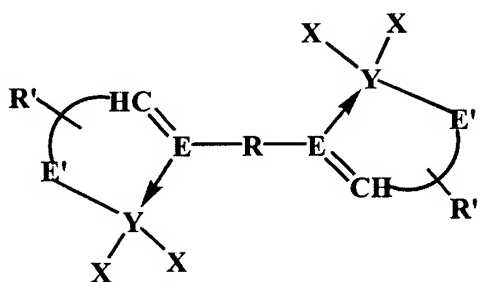
Claim 30 (withdrawn): The method of claim 21, wherein m and n are 2.

Claim 32 (withdrawn): The method of claim 21, wherein the reaction is conducted in the presence of BBr₃.

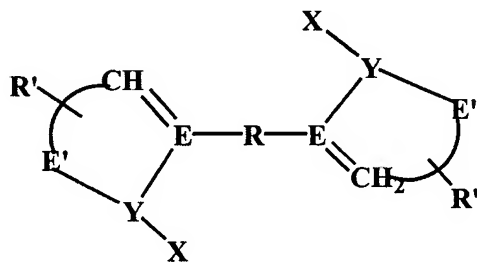
Claim 33 (withdrawn): The method of claim 32, wherein the phosphate ester or ether and BBr₃ are added in equimolar amounts.

Claim 34 (withdrawn): The method of claim 21, wherein the dealkylation is conducted at ambient temperature.

Claim 35 (new): A chemical compound comprising a chelating ligand L, the compound having the general formula:

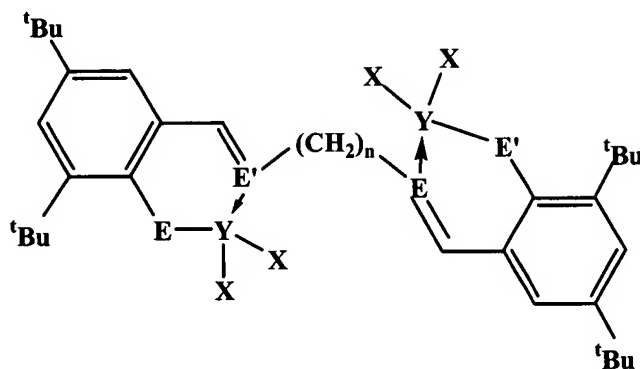


or

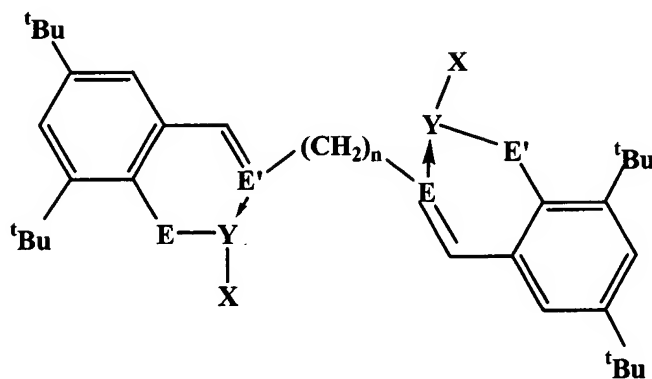


wherein Y is selected from the Group 13 elements consisting of boron, aluminum, gallium, indium, tellurium, and any combination thereof, X is selected from the halide group consisting of fluorine, chlorine, bromine, iodine, astatine, and any combination thereof, E and E' are selected from the group consisting of C, N, O, S, and any combination thereof, and R and R' are alkyl, aryl, or alkylaryl.

Claim 36 (new): A chemical compound comprising a chelating ligand L, the compound having the general formula:



or



wherein Y is selected from the Group 13 elements consisting of boron, aluminum, gallium, indium, tellurium, and any combination thereof, X is selected from the halide group consisting of fluorine, chlorine, bromine, iodine, astatine, and any combination thereof, E and E' are selected from the group consisting of C, N, O, S, and any combination thereof,

and n is an integer having a value of at least 1.

Claim 37 (new): The chemical compound of claim 36, wherein L is selected from the group consisting of Salen (^tBu), Salpen (^tBu), Salben (^tBu), and Salhen (^tBu).

Claim 38 (new): The chemical compound of claim 36, wherein Y is boron or aluminum.

Claim 39 (new): The chemical compound of claim 36, wherein X is chlorine, bromine, or iodine.

Claim 40 (new): The chemical compound of claim 36, wherein n is 2.

Claim 41 (new): A method for dealkylation of a phosphate ester or an ether, comprising contacting the phosphate ester or ether with the chemical compound of claim 35.

Claim 42 (new): A method for dealkylation of a phosphate ester or an ether, comprising contacting the phosphate ester or ether with the chemical compound of claim 36.

Claim 43 (new): The method of claim 42, wherein:

L is selected from the group consisting of Salen (^tBu), Salpen (^tBu), Salben (^tBu), and Salhen (^tBu);

Y is boron or aluminum;

X is chlorine, bromine, or iodine; and

n is 2.

Claim 44 (new): A catalytic method for dealkylation of a phosphate ester or an ether, comprising contacting the phosphate ester or ether with the chemical compound of claim 35 in the presence of BBr₃.

Claim 45 (new): A catalytic method for dealkylation of a phosphate ester or an ether, comprising contacting the phosphate ester or ether with the chemical compound of claim 36 in the presence of BBr₃.

Claim 46 (new): The method of claim 45, wherein:

L is selected from the group consisting of Salen (^tBu), Salpen (^tBu), Salben (^tBu), and Salhen (^tBu);

Y is boron or aluminum;

X is chlorine, bromine, or iodine; and

n is 2.

Claim 47 (new): The method of claim 45, wherein the phosphate ester or ether and BBr_3 are added in equimolar amounts.

Claim 48 (new): The method of claim 45, wherein the dealkylation is conducted at ambient temperature.